

**WHAT IS CLAIMED IS:**

1. A method for efficient multilingual text input, comprising:  
    formulating a candidate based on a prefix and an input,  
    wherein the candidate comprises a set of symbols and a score;  
    formulating a prediction based on the set of symbols  
    associated with the candidate;  
    formulating a proposition based on the candidate or the  
    prediction.
2. The method of claim 1, wherein the prefix is empty, entered  
by a user, or a previous proposition.
3. The method of claim 1, wherein the score of the candidate is  
based on a score of the prefix concatenated with the input.
4. The method of claim 3, wherein the score of the candidate is  
based on a score of the input combined with the score of the  
prefix.
5. The method of claim 4, wherein the candidate is one of a set  
of candidates where the score of each of the candidates in the  
set is above a threshold.
6. The method of claim 5, wherein formulating a candidate  
further comprises ranking the set of candidates based upon the  
score of each of the candidates.
7. The method of claim 6, wherein formulating a candidate is  
based on a language model.

8. The method of claim 7, wherein the score of the candidate is based on a string which is the longest string in the language model which is a extension of the prefix.

9. The method of claim 1, wherein the prediction is one of a set of predictions.

10. The method of claim 9, wherein formulating a prediction is based on a usage model.

11. The method of claim 10, wherein each of the set of predictions is a sequence corresponding to a path through a tree starting from a node based on the candidate and ending with a terminal node.

12. The method of claim 11, wherein formulating a prediction comprises scoring each of the predictions based on frequency of appearance, length of the path through the tree, or the candidate.

13. The method of claim 9, further comprising determining a set of synonyms for the prediction.

14. The method of claim 13, wherein the set of synonyms is based on the terminal node of the prediction in the tree.

15. The method of claim 14, wherein the set of synonyms is stored in the terminal node.

16. The method of claim 14, further comprising scoring each of the set of synonyms based on a score of the prediction and the

score of the candidate on which each synonym is based.

17. The method of claim 16, further comprising ranking the set of synonyms.

18. The method of claim 17, further comprising storing the set of synonyms, the set of predictions and a set of candidates, wherein the set synonyms, the set of candidates, and the set of predictions are ranked.

19. A computer readable medium having code for efficient multilingual text input, wherein the code is embodied within computer readable medium, the code comprising instructions for:

    formulating a candidate based on a prefix and an input, wherein the candidate comprises a set of symbols and a score;

    formulating a prediction based on the set of symbols associated with the candidate;

    formulating a proposition based on the candidate or the prediction.

20. The computer readable medium of claim 19, wherein the prefix is empty, entered by a user, or a previous proposition.

21. The computer readable medium of claim 19, wherein the score of the candidate is based on a score of the prefix concatenated with the input.

22. The computer readable medium of claim 21, wherein the score of the candidate is based on a score of the input combined with the score of the prefix.

23. The computer readable medium of claim 22, wherein the candidate is one of a set of candidates where the score of each of the candidates in the set is above a threshold.

24. The computer readable medium of claim 23, wherein formulating a candidate further comprises ranking the set of candidates based upon the score of each of the candidates.

25. The computer readable medium of claim 24, wherein

formulating a candidate is based on a language model.

26. The computer readable medium of claim 25, wherein the score of the candidate is based on a string which is the longest string in the language model which is an extension of the prefix.

27. The computer readable medium of claim 19, wherein the prediction is one of a set of predictions.

28. The computer readable medium of claim 27, wherein formulating a prediction is based on a usage model.

29. The computer readable medium of claim 28, wherein each of the set of predictions is a sequence corresponding to a path through a tree starting from a node based on the candidate and ending with a terminal node.

30. The computer readable medium of claim 29, wherein formulating a prediction comprises scoring each of the predictions based on frequency of appearance, length of the path through the tree, or the candidate.

31. The computer readable medium of claim 27, further comprising instructions for determining a set of synonyms for the prediction.

32. The computer readable medium of claim 31, wherein the set of synonyms is based on the terminal node of the prediction in the tree.

33. The computer readable medium of claim 32, wherein the set

of synonyms is stored in the terminal node.

34. The computer readable medium of claim 32, further comprising instructions for scoring each of the set of synonyms based on a score of the prediction and the score of the candidate on which each synonym is based.

35. The computer readable medium of claim 34, further comprising instructions for ranking the set of synonyms.

36. The computer readable medium of claim 35, further comprising instructions for storing the set of synonyms, the set of predictions and a set of candidates, wherein the set of synonyms, the set of candidates, and the set of predictions are ranked.

37. A system for efficient multilingual text input, comprising:  
a device operable for:

formulating a candidate based on a prefix and an input,  
wherein the candidate comprises a set of symbols and a score;

formulating a prediction based on the set of symbols  
associated with the candidate;

formulating a proposition based on the candidate or the  
prediction.

38. The system of claim 37, wherein the prefix is empty,  
entered by a user, or a previous proposition.

39. The system of claim 37, wherein the score of the candidate  
is based on a score of the prefix concatenated with the input.

40. The system of claim 39, wherein the score of the candidate  
is based on a score of the input combined with the score of the  
prefix.

41. The system of claim 40, wherein the candidate is one of a  
set of candidates where the score of each of the candidates in  
the set is above a threshold.

42. The system of claim 41, wherein formulating a candidate  
further comprises ranking the set of candidates based upon the  
score of each of the candidates.

43. The system of claim 42, wherein formulating a candidate is  
based on a language model.

44. The system of claim 43, wherein the score of the candidate is based on a string, wherein the string is the longest string in the language model which is an extension of the prefix.

45. The system of claim 37, wherein the prediction is one of a set of predictions.

46. The system of claim 45, wherein formulating a prediction is based on a usage model.

47. The system of claim 46, wherein each of the set of predictions is a sequence corresponding to a path through a tree starting from a node based on the candidate and ending with a terminal node.

48. The system of claim 47, wherein formulating a prediction comprises scoring each of the predictions based on frequency of appearance and length of the path through the tree.

49. The system of claim 45, wherein the device is further operable for determining a set of synonyms for the prediction.

50. The system of claim 49, wherein the set of synonyms is based on the terminal node of the prediction in the tree.

51. The system of claim 50, wherein the set of synonyms is stored in the terminal node.

52. The system of claim 50, wherein the device is further operable for scoring each of the set of synonyms based on a score of the prediction and the score of the candidate on which



each synonym is based.

53. The system of claim 52, wherein the device is further operable for ranking the set of synonyms.

54. The system of claim 53, wherein the device is further operable for storing the set of synonyms, the set of predictions and a set of candidates, wherein the set of synonyms, the set of candidates, and the set of predictions are ranked.